

The Impact of Michigan Merit Curriculum Reform and Graduation Expectations for Special Education and At-Risk Students

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EXECUTIVE RESEARCH SUMMARY 2007-2009

Phase I: Emailed surveys to Michigan school administrators and focus groups in Oakland, Wayne, Kent, and Eastern Upper Peninsula.

Phase II: Quantitative review of Algebra I and II success rates in the State of Michigan.

Phase III: Qualitative interviews with students in the class of 2011 who failed Algebra I.

Statistical Research Projections of the New MMC Reform for the School Year 2010-2011

The following research bullets are a summary of a state-wide research project that examined the expected impact of the MMC reform for students with cumulative GPAs of less than a 2.0 and special education students. The survey included both qualitative and quantitative data analysis by reviewing all 527 school districts in the state, along with comparisons to standards in 49 other US states. The following bullet points are extracted data pieces. For more information on a comprehensive research finding, contact Dr. Derrick R. Fries.

- For the school year 2010-2011, the US average of high school graduation requirements in math is 2.76 credits.
- Only five states require four credits of math for core graduation diploma certificates. Besides Michigan, there is North Carolina, South Carolina, Georgia and Alabama
- Michigan is the only US state that requires Algebra II as a core graduation requirement.
- 93% of the school administrators who participated in this research study believe the Algebra II requirement will increase high school dropout rates.
- For the graduation class of 2007, Michigan high schools graduated about 13% of students, approximately 15,000 students, with a cumulative GPA of less than a 2.0.
- Of the 15,000 students who graduated with less than a 2.0 GPA, about 5% (750 students) attempted Algebra II.
- Of the 750 students who attempted Algebra II in 2007, only approximately 15 students received Algebra II credit.
- The vast majority of school administrators believe elective course offerings will greatly diminish by 2010-2011.
- Michigan's graduation rate for the 2006-2007 school year was 70.4%, placing us 32nd (1 being best, 50th being worst) out of 50 states.
- 83% of school administrators believe that Algebra II is not a necessary graduation requirement for employability.
- Approximately 20,000 high school freshmen, effective June 2008, have failed Algebra I. Therefore, already placing them behind in credit completion under the new MMC standards.
- High school dropout rates for at-risk and special ed students for May-June 2011 can be expected to increase to nearly 38,000 high school dropouts.

**MDE Historical Date
June 15, 2008**

Algebra I Success Rate

Frosh. High School Algebra I failure rates, June 15, 2008 (Percentage of Frosh. Students Class of 2011 that failed Alg. I).

Oakland County 27% of all Freshman failed Algebra I.

Macomb County 29% of all Freshman failed Algebra I.

Source: Data gathered in collaboration with Dr. Gail Green from Macomb County ISD and Dr. Ernie Bauer from Oakland Schools ISD.

Ranked States 1-6: U.S. High School Graduation Rates 2008

State	Graduation Rate	Math Req. For Graduation	2008 ACT Math Score	2008 NAEP Math Scores
1. NJ	83.30%	3 math (flex)	23.2	289
2. IA	82.60%	2 math (flex)	22	285
3. WI	80.50%	2 math (flex)	22.3	286
4. PA	80.40%	2 math (flex)	22.3	286
5. VE	80.20%	2 math (flex)	22.4	291
6. NE	80%	0 math (local dist.)	21.8	284
Composite Average			22.3	286.8

VS.

Ranked Order: States with Four Credits of High School Math Requirements 2008

State	Graduation Rate	Math Req. for Graduation	2008 ACT Math Score	2008 NAEP Math Scores
30. MI	70.50%	4 math	19.5	277
42. NC	67%	4 math	21.8	284
44. AL	61.30%	4 math	19.5	266
46. GA	57.60%	4 math	20.6	275
47. SC	55.60%	4 math	20.1	282
Composite Average			20.3	276.8

Source : 2008 National Assessment of Educational Progress (US Math Section)
2008 Educational Research Center (US Graduation Rates)

Chasing Algebra II Credit

Graduates Class of 2007

Three sample high schools:

- HS #1 Suburbia (560 Graduates)
 - 68 Students graduated with less than a 2.0
 - Of the 68, 11 Attempted Algebra II
 - 3 Received Algebra II credit
- HS #2 Urban (451 Graduates)
 - 82 Students graduated with less than a 2.0
 - Of the 82, 10 Attempted Algebra II
 - 2 Received Algebra II credit
- HS #3 Rural (257 Graduates)
 - 44 Students graduated with less than a 2.0
 - Of the 44, 7 Attempted Algebra II
 - 1 Received Algebra II credit.

Student Quotes:

Suburban High School in southeastern Michigan

Sophomore Male Failed Algebra I 1st Semester

“It is too hard to get, and I don’t know why, too difficult to get it.” (Spring 2009)

Rural High School in northern Michigan

Sophomore Student (Special Education 504)

“Math sucks....The teacher sucks.... No one will help me....everything just sucks!” (Spring 2009)

School Administrator Emailed Survey Results:

93% of respondent districts indicated that the new MMC graduation standards would decrease graduation rates. (Winter 2007)

School Administrator Focus Group Results:

“In terms of the total number of electives, for us, it is going down by about three credits as we funnel more kids into those core areas. So our elective courses are taking the hits, so to speak.” (6/13/2007)

